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CLAIMS

1. An absorbent article comprising

5 a liquid-permeable layer (18) disposed towards the wearer's body when the said article is in use;

10 a liquid-impermeable layer (20) disposed away from the wearer's body when the said article is in use; as well as

an absorbent body arranged between the liquid-permeable layer (18) and the liquid-impermeable layer (20),

15 characterized in that

the absorbent body comprises an absorbent material (32) which remains able to flow even after having been in contact with a liquid.

2. An absorbent article comprising

25 a liquid-impermeable layer (116) disposed away from the body when the article is in use, as well as an absorbent body (114; 114a, 114b) covered by a liquid-permeable layer and comprising an absorbent material (122) which remains able to flow even after contact with liquid, with the absorbent body (114; 114a, 114b) being connected to the liquid-impermeable layer (116) in a central area of the said layer.

3. An absorbent article according to claim 2, characterized in that the connection between the absorbent body (114; 114a, 114b) and the liquid-impermeable layer (20; 116) is made by an adhesive means.

4. An absorbent article according to one of claims 2 or 3, characterized in that the connection between the absorbent body (114; 114a, 114b) and the liquid-impermeable layer (11b) is made by a seam (124) or by several seams (124).
5. An absorbent article according to one of the preceding claims, characterized in that an absorbent, soft material (110) which serves as a secondary storage is arranged on the side of the liquid-impermeable layer (20; 116) disposed towards the body of the wearer.
6. An absorbent article according to claim 5, characterized in that the soft material (110) serving as a secondary store, is a coform material, an airlaid material, tissue cotton-wool and/or a non-woven material, in particular a spin-bonded fabric or card web.
7. An absorbent article according to one of the preceding claims, characterized in that the absorbent material (32; 122) which remains able to flow even after contact with a liquid is embedded in a matrix made of fibrous material.
8. An absorbent article according to claim 7, characterized in that the absorbent material (32; 122) which remains able to flow even after contact with a liquid is mixed into the fibrous material in a homogenous way.
9. An absorbent article according to claim 7 or 8, characterized in that the absorbent material (32; 122) which remains able to flow even after contact with a liquid is embedded between layers of fibrous material.

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10. An absorbent article according to one of claims 7 to 9, characterized in that the fibrous material is cellulose, a cellulose/polypropylene mixture and/or a coform material.
- 5 11. An absorbent article according to one of claims 7 to 10, characterized in that the ratio of absorbent material (32; 122) which remains able to flow even after contact with a liquid, to fibrous material, is between 1 to 25% by weight to 99 to 75% by weight.
- 10 12. An absorbent article according to claim 11, characterized in that the ratio of absorbent material (32; 122) which remains able to flow even after contact with a liquid, to fibrous material, is between 5 to 20% by weight to 95 to 80% by weight.
- 15 13. An absorbent article according to claim 12, characterized in that the ratio of absorbent material (32; 122) which remains able to flow even after contact with a liquid, to fibrous material, is between 10 to 15% by weight to 90 to 85% by weight.
- 20 14. An absorbent article according to one of the preceding claims, characterized in that the absorbent body (114; 114a, 114b) apart from the absorbent material (32; 122) which remains able to flow even after contact with a liquid, contains at least one care substance.
- 25 15. An absorbent article according to claim 14, characterized in that the care substance of which there is at least one is an extract of aloe vera, marigold and/or chamomile.
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16. An absorbent article according to one of claims 14 or 15, characterized in that the care substances are enclosed in microcapsules.
- 5 17. An absorbent article according to claim 16, characterized in that the care substances are enclosed in the microcapsules in such a way that when the absorbent body is worn, the care substances are releasable by forces acting upon it and/or by body warmth.
- 10 18. An absorbent article according to one of the preceding claims, characterized in that bactericidal, fungicidal and/or viricidal substances are applied in an immobilised way on or in the absorbent material which remains able to flow even after contact with liquid or in an adsorptive way on the absorbent material.
- 15 19. An absorbent article according to claim 18, characterized in that chlorinated levulinic acid and/or alkyl dimethylbenzyl ammonium halogenides are applied as bactericidal substances.
- 20 20. An absorbent article according to one of the preceding claims, characterized in that the absorbent material (32; 122) which remains able to flow even after contact with a liquid, keeps its ability to flow up to at least 25 10 ml liquid per gram of material.
- 30 21. An absorbent article according to one of the preceding claims, characterized in that the absorbent material (32; 122) comprises spherical particles.
- 35 22. An absorbent article according to claim 21, characterized in that the diameter of the spherical particles is between 100 and 2000  $\mu\text{m}$ , in particular between 200 and 800  $\mu\text{m}$ .

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23. An absorbent article according to one of the preceding claims, characterized in that the absorbent material (32; 122) comprises at least in part polymethylene urea.
24. An absorbent article according to claim 23, characterized in that at least one third of the absorbent material (32; 122) comprises polymethylene urea.
25. An absorbent article according to claim 23, characterized in that at least half of the absorbent material (32; 122) comprises polymethylene urea.
26. An absorbent article according to claim 23, characterized in that at least two thirds of the absorbent material (32; 122) comprises polymethylene urea.
27. An absorbent article according to claim 23, characterized in that at least 80% of the absorbent material (32; 122) comprises polymethylene urea.
28. An absorbent article according to claim 23, characterized in that the absorbent body is made from polymethylene urea.
29. An absorbent article according to one of claims 23 to 28, characterized in that the polymethylene urea material is free of ether groups and formaldehyde.
30. An absorbent article according to one of claims 1 to 27 or 29, characterized in that the absorbent material (32, 122) comprises a superabsorbent material.

31. An absorbent article according to claim 30, characterized in that the superabsorbent material is a polyacrylate.
32. An absorbent article according to one of the preceding claims, characterized in that the absorbent body comprises at least one core (28) which contains the absorbent material (32; 122) which remains able to flow even after contact with a liquid, whereby preferably the length  $l$  of the core (28) is smaller than or equal to the length  $L$  of the absorbent article, and the width  $w$  of the core (28) is smaller than or equal to the width  $W$  of the absorbent article.
33. An absorbent article according to one of the preceding claims, characterized in that the absorbent body comprises at least two chambers (36, 38, 40; 114; 114a, 114b) which are separated from each other by at least one wall.
34. An absorbent article according to claim 33, characterized in that the wall, of which there is at least one, is aligned in longitudinal direction of the absorbent article.
35. An absorbent article according to claim 33, characterized in that the wall, of which there is at least one, is aligned in transverse direction of the absorbent article.
36. An absorbent article according to claim 33, characterized in that the absorbent body is divided into compartments by at least one wall aligned in longitudinal direction of the absorbent article, and by at least one further wall aligned in transverse direction of the absorbent article.

37. An absorbent article according to one of claims 33 to 36, characterized in that the core (28), of which there is at least one, of the absorbent body, is subdivided into chambers.
- 5 38. An absorbent article according to one of the preceding claims, characterized in that it is a hygiene article.
- 10 39. An absorbent article according to claim 38, characterized in that it is a feminine hygiene article.
- 15 40. An absorbent article according to claim 39, characterized in that the feminine hygiene article is a sanitary napkin (10; 100), in particular an ultra-thin sanitary napkin.
- 20 41. An absorbent article according to claim 39, characterized in that the feminine hygiene article is a panty liner.
- 25 42. An absorbent article according to one of claims 38 to 41, characterized in that the liquid-permeable layer (18) comprises a central aperture.
- 30 43. An absorbent article according to one of claims 1 to 38, characterized in that the absorbent article is a diaper.
44. An absorbent article according to one of claims 1 to 38, characterized in that the absorbent article is an incontinence pad.

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